

Title (en)

COPOLYMERS OF DIOXOLANES AND MALEIC ANHYDRIDE.

Title (de)

COPOLYMER AUS DIOXOLANEN UND MALEINSÄUREANHYDRID.

Title (fr)

COPOLYMERES DE DIOXOLANES ET D'ANHYDRIDE MALEIQUE.

Publication

EP 0522046 B1 19940608

Application

EP 91907375 A 19910314

Priority

- US 9101591 W 19910314
- US 49817890 A 19900323

Abstract (en)

[origin: US5019635A] Copolymers are made by reacting maleic anhydride or a related compound with a 4-vinyl-1,3-dioxolane in the presence of a free radical initiator. The dioxolane reactant can be made by reacting a ketone with 3,4-epoxy-1-butene, or a substituted derivative thereof.

IPC 1-7

C08F 216/38

IPC 8 full level

C08F 20/02 (2006.01); **C08F 24/00** (2006.01); **C08F 222/06** (2006.01); **C08F 224/00** (2006.01)

CPC (source: EP US)

C08F 222/06 (2013.01 - EP US); **C08F 224/00** (2013.01 - EP US)

Citation (examination)

- Chemical Abstracts, vol 73, no 22, November 30 1970, Columbus, Ohio, USA. Ouchi et al. 'Polymerization of diallylidenepentaeurythrol. 7.copolymerization of 2-vinyl-1,3-dioxolane with maleic anhydride', see page 2, column 1, abstract no 110169b
- Polymer Reprints, vol 30, no 1, April 1989, (American Chemical Society, Dallas, Texas, USA) W J Bailey et al. 'Further investigation of regiospecific free radical ring opening polymerization', see pages 195-196

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

US 5019635 A 19910528; AT E106908 T1 19940615; CA 2078551 A1 19910924; CA 2078551 C 19961217; DE 69102428 D1 19940714; DE 69102428 T2 19950119; DK 0522046 T3 19940822; EP 0522046 A1 19930113; EP 0522046 B1 19940608; ES 2055600 T3 19940816; JP 3022923 B2 20000321; JP H05505842 A 19930826; WO 9114721 A1 19911003

DOCDB simple family (application)

US 49817890 A 19900323; AT 91907375 T 19910314; CA 2078551 A 19910314; DE 69102428 T 19910314; DK 91907375 T 19910314; EP 91907375 A 19910314; ES 91907375 T 19910314; JP 50656991 A 19910314; US 9101591 W 19910314